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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/790,965

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Jathan D. Edwards

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Attention: Eric D. Levinson
Imation Corp.
Legal Affairs
P.O. Box 64898
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EXAMINER

BODAWALA, DIMPLE N

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

02/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/790,965	Applicant(s) EDWARDS ET AL.	
	Examiner DIMPLE N. BODAWALA	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-35 and 42-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-35 and 42-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 30-35 and 42-52 are on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-35 of U.S. Patent No. 7,352,685.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims of parent case cite each and every limitations of claims of instant application plus additional limitations not included in the claims of the instant application, wherein claimed language of the parent case is different than the claimed language of the instant application. Furthermore, noted by the *Federal Circuit in Eli Lilly v. Barr*, “a patentable distinction does not lie where a later claim is anticipated by earlier

one. See also *In re Berg* and *In re Goodman* which established that a later genus claim limitation is anticipated by and therefore not patentably distinct from an earlier species claim.

3. Claims 30-35 and 42-52 are on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 7,349,323. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims of parent case cite each and every limitations of claims of instant application plus additional limitations not included in the claims of the instant application, wherein claimed language of the parent case is different than the claimed language of the instant application. Furthermore, noted by the *Federal Circuit in Eli Lilly v. Barr*, “a patentable distinction does not lie where a later claim is anticipated by earlier one. See also *In re Berg* and *In re Goodman* which established that a later genus claim limitation is anticipated by and therefore not patentably distinct from an earlier species claim.

4. Claims 42-46 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,890,704. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method as set forth in claims of parent case uses each and every limitations of the claims of the instant application plus additional limitations not included in the claims of the instant application, wherein claimed language of the parent case is different than the claimed language of the instant application. Furthermore, noted by the *Federal*

Circuit in Eli Lilly v. Barr, “a patentable distinction does not lie where a later claim is anticipated by earlier one. See also *In re Berg* and *In re Goodman* which established that a later genus claim limitation is anticipated by and therefore not patentably distinct from an earlier species claim.

5. Claims 30-34 and 47-51 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 8-14 of U.S. Patent No. 6,728,196. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims of parent case cite each and every limitations of claims of instant application plus additional limitations not included in the claims of the instant application, wherein claimed language of the parent case is different than the claimed language of the instant application. Furthermore, noted by the *Federal Circuit in Eli Lilly v. Barr*, “a patentable distinction does not lie where a later claim is anticipated by earlier one. See also *In re Berg* and *In re Goodman* which established that a later genus claim limitation is anticipated by and therefore not patentably distinct from an earlier species claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 42 and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Sandstrom (US 6,002,663).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

8. Sandstrom (‘663) discloses an invention which comprises stamper (62) includes tracks formed of data and pits corresponding to the data to be embossed into the information area (26) of the disc substrate (24) (See col.8 lines 30-34), which inherently suggests that the stamper having surface which defines data layer with adjacent of stamper grooves (38) and lands, wherein groove (38) defines groove bottom and land defines as land tops (See figure 2). Figure 2 further teaches that the groove (38) extend down into the data layer or surface of stamper or disc. It further teaches that groove having depth 0.3 mm which is higher than 50 nanometer (See col.7 lines 15-24). It further teaches that the formatted surface having a track pitch which is less than 0.37 micrometer (See col.4 lines 1-5), which can be understandable that the formatted surface having track pitch which is less than 425 nanometer as well as less than 700 nanometer.

9. Claims 42 and 46 of the instant application contain the method step for the production of the second-generation stamper, which is created from a first generation stamper, and also the laser spot size associated with a laser used to perform laser etching of the master pattern of the master disk. With regard to the claim recitations regarding the method of forming the apparatus, such relate to the method of producing the claimed apparatus, which does not impart patentability to the apparatus claims. The determination of patentability is based on the product apparatus itself, *In re Brown*, 173 USPQ 685, 688, and the patentability of a product does not depend on its method of production, *In re Pilkington*, 162 USPQ 145, 174; see also *In re Thorpe*, 227 USPQ 964 (AFC 1985). Sandstrom ('663) discloses all claimed structural limitations as discussed above, and, thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. **Claims 42, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (US 5,325,353) in view of Ohtomo et al. (US 5,763,037).**

12. Sasaki et al. discloses an invention which comprises a substrate (1) as a stamper having a recording layer (3), wherein recording layer is also known as a data layer with pattern, wherein data layer comprises lands (8) and groove (9), wherein groove defines groove bottom and land defines land tops (See figure 1A). Figure 1A further shows that

the groove bottoms (9) are wider than land tops (8). It further teaches that the track pitch is set to 1.6 micrometer (See col.2 lines 66-67). It further teaches that the laser spot size is approximately 1 micrometer (See abstract), which inherently suggests that the track pitch (1.6 micrometer) is less than 2 multiplied by a laser spot size (1 micrometer $\Rightarrow 1 * 2 = 2$ micrometer $>$ track pitch). It further teaches that the width of the groove bottom (9) is 1 micrometer which is converted to the 1000 nm, which inherently suggests that the width of the groove bottom is greater than 100 nm as well as greater than 250 nm. It discloses width of the groove is 1000 nanometer which is greater than 25% of the track pitch as well as greater than the 35% of the track pitch. It further inherently suggests that the width of the groove is greater than 50% of the track pitch. Here, prior art discloses spot size for defining the master pattern of master disc, but the dimension of laser spot size is inherently present in the art, and, thus, the current application is unpatentable over the prior art. It further teaches that the groove bottoms (9) are generally flat and coplanar having sharp corners (See figure 1A).

13. Sasaki et al. ('353) discloses all claimed structural limitations as discussed above. It further teaches that the track pitch is set to 1.6 micrometer (See col.2 lines 66-67), but fails to teach or suggest that the track pitch is less than 700 nanometer.

14. Ohtomo et al. discloses stamper (10) having stamper surface (12), wherein stamper surface comprises recess (21) and projections (11), wherein bottom portion of recesses (21a) having width about 1 to 1.3 micrometer, and the track pitch is set to 0.6 micrometer which is converted to 600 nm (See col.7 lines 60 through col.8 lines 12).

15. Claims 42 and 46 of the instant application contain the method step for the production of the second-generation stamper, which is created from a first generation stamper, and also the laser spot size associated with a laser used to perform laser etching of the master pattern of the master disk. With regard to the claim recitations regarding the method of forming the apparatus, such relate to the method of producing the claimed apparatus, which does not impart patentability to the apparatus claims. The determination of patentability is based on the product apparatus itself, *In re Brown*, 173 USPQ 685, 688, and the patentability of a product does not depend on its method of production, *In re Pilkington*, 162 USPQ 145, 174; see also *In re Thorpe*, 227 USPQ 964 (AFC 1985).

16. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Sasaki et al. ('353) by providing track pitch which is less than 700 nanometer as taught by Ohtomo et al. in order to increase degree of the modulation for enlarging the tracking signal.

17. **Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandstrom (US 6,002,663) in view of Sasaki et al. (US 5,325,353).**

18. Sandstrom ('663) discloses all claimed structural limitations as discussed above, but fails to teach or suggests that the width of groove bottoms is greater than 25% of the track pitch.

19. Sasaki et al. ('353) discloses an invention which comprises a substrate (1) as a stamper having a recording layer (3), wherein recording layer is also known as a data layer with pattern, wherein data layer comprises lands (8) and groove (9), wherein groove

defines groove bottom and land defines land tops (See figure 1A). Figure 1A further shows that the groove bottoms (9) are wider than land tops (8). It further teaches that the groove bottoms (9) are generally flat and coplanar with sharp corners (See figure 1A). It further teaches that the track pitch is set to 1.6 micrometer (See col.2 lines 66-67). It further teaches that the width of the groove bottom (9) is 1 micrometer which is converted to the 1000 nm, which inherently suggests that the width of the groove bottom is greater 100 nm as well as greater than 250 nm. It discloses width of the groove is 1000 nanometer which is greater than 25% of the track pitch as well as greater than the 35% of the track pitch.

20. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Sandstrom ('663) by providing width of the groove bottoms is greater than 25% of track pitch because such an alignment is involved to represent the quantity of reflected beam from the groove surface as well as from the mirror surface disc for improving the measure of evaluation of noise in the optical disc during molding process as suggested by Sasaki et al. ('353).

Response to Arguments

21. Applicant argues that prior art, Suzuki has typographical error for track pitch (1.6 micro inches). Suzuki fails to enable this mis-translated dimension that the Examiner relies upon in the rejections. However, Applicant's all arguments are fully considered and therefore, rejection of the claims over Suzuki has been withdrawn in view of declaration under 37 CFR 1.132 from an inventor of the current application.

22. Applicant further argues that at the time of invention, the subject matter of the prior art, Sandstrom (US 6,002,663) and the subject matter of all pending claims of the instant application were assigned and/or subjected to assignment to Imation Corp. For this reason, Sandstorm is disqualified as prior art under 35 USC 103 (C) for use in obviousness rejections. Applicant's all arguments are fully considered and found persuasive therefore, the rejection of claims over Sandstrom has been withdrawn.

23. Applicant submits that the prior art, Sandstrom qualifies as prior art under 102 (e), although this prior art is disqualified as being prior art under 35 USC 103. Applicant argues that claims 42 and 46 structurally recite a second generation stamper. This is the most basic requirement of independent claim 42. Therefore, regardless of how this second generation stamper is created, the fact that the stamper is second-generation stamper is a structural aspect of claims 42 and 46. Second generation stamper differ from first-generation stamper for example in terms of the orientation of lands and grooves on the stamper surface. Thus, prior art fails to provide any type of second-generation stamper.

24. In response to Applicant's arguments, Sandstrom discloses stamper having a track pitch which is less than 0.37 micrometer (See col.4 lines 1-5), which can be understandable that the formatted surface having track pitch which is less than 425 nanometer as well as less than 700 nanometer. Thus, stamper of Sandstrom having features as claimed. However, the patentability of a product or apparatus, however, does not depend on its method of production. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964,

966 (Fed. Cir. 1985); *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972); *In re Pilkington*, 411 F.2d 1345, 1348, 162 USPQ 145, (CCPA 1969); (*MPEP* § 2113). In this case, prior art discloses a product with all of the structural features defined in the claimed article, and, thus, the claims are anticipated by the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIMPLE N. BODAWALA whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dimple N Bodawala
Examiner
Art Unit 1791

/D. N. B./
Examiner, Art Unit 1791

/Philip C Tucker/

Supervisory Patent Examiner, Art Unit 1791